Report On Business®

Economy Continues Steady Growth; PMI Climbs to 54.8%; New Orders Surge to 63.1%

AUGUST REPORT

Analysis by the National Association of Purchasing Management Business Survey Committee; chair, Robert J. Bretz, C.P.M., director of corporate purchasing, Pitney Bowes, Inc.

The manufacturing economy expanded in August for the third consecutive month, say the nation's purchasing executives in their latest ***Report on Business.*** Production rose moderately for the third consecutive month. New Orders advanced sharply in August for the fourth consecutive increase. New Export Orders expanded in August at a higher rate of growth than last month. Imports broke a string of 15 consecutive months of decline.

Employment declined in August for the 31st straight month, but at the lowest rate of decline since July 1990. Inventories declined in August for the 33rd consecutive month. The Supplier Deliveries Index declined in August, after increasing in July for the first time since August 1990. Prices declined again for the eighth straight month, although at a significantly lesser rate than in the first half of 1991.

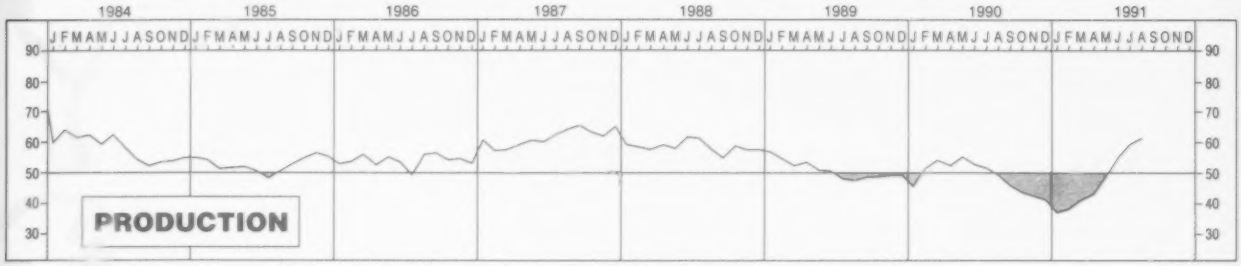
The ***Report*** was issued by Robert J. Bretz, C.P.M., chairman of the National Association of Purchasing Management's Business Survey Committee, and director of corporate purchasing at Pitney Bowes, Inc. Said Bretz, "The economic recovery galvanized in August. The continued growth in the manufacturing economy was apparently achieved without any growth in Inventory. The sharp rate of growth in New Orders, with a boost from expanding Export Orders, signals continued healthy economic growth for at least the next few months."

PURCHASING MANAGERS' INDEX

PURCHASING MANAGERS' INDEX (PMI)

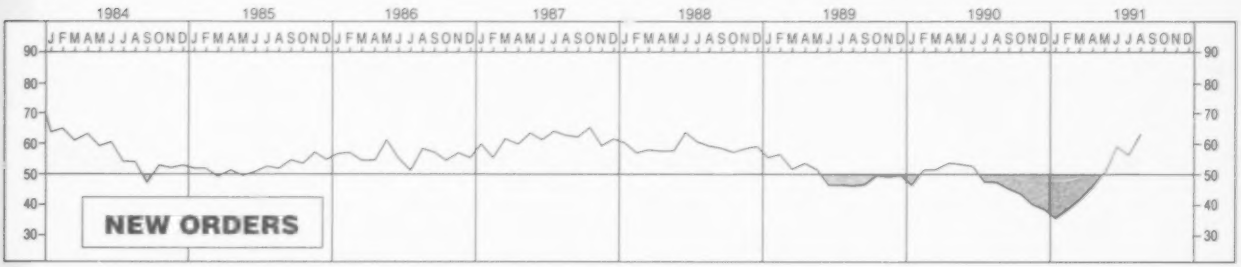
August '90	47.4	March '91	40.0
September '90	44.9	April '91	42.1
October '90	43.6	May '91	45.4
November '90	41.6	June '91	50.9
December '90	40.5	July '91	51.8
January '91	37.7	August '91	54.8
February '91	38.5		

The Purchasing Managers' Index (PMI) rose to 54.8%, up from 51.8% in July, and is the highest since December 1988 (56.0%). The rise marked the seventh consecutive month the PMI has increased from the previous month and the third straight month it has registered over 50%. A reading above 50% indicates that the manufacturing economy is generally expanding; below 50%, that it is generally declining. Bretz added, "The PMI averaged 45.1% for the first eight months of 1991, a rate that past experience indicates would be consistent with +0.4% real growth in the overall economy. However, if the PMI remains unchanged at the August level for the balance of the year, then past experience also indicates this would be consistent with real GNP growth of approximately +1.4% for all of 1991."



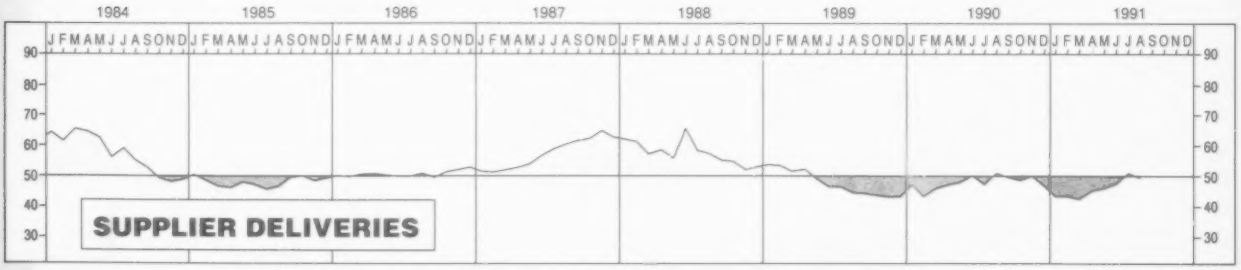
Production continued to grow in August for the third consecutive month. The Production Index rose modestly to 61.4%, up from 59.5% in July, and the highest since June 1988 (61.7%). With a substantial surge in New Orders in August, Production growth should also remain respectable.

Production	%Better	%Same	%Worse	Net	Index
August 1991	34	49	17	+17	61.4
July 1991	29	53	18	+11	59.5
June 1991	31	51	18	+13	55.0
May 1991	21	57	22	-1	48.8



New Orders expanded in August for the fourth straight month. The New Orders Index rose to 63.1%, up substantially from 56.3% in July and the highest rate of growth in over three years (June 1988, 63.6%). The strong growth in New Orders virtually assures continued growth in Production in the next few months.

New Orders	%Better	%Same	%Worse	Net	Index
August 1991	38	45	17	+21	63.1
July 1991	31	46	23	+8	56.3
June 1991	38	42	20	+18	59.1
May 1991	28	47	25	+3	50.6



The Supplier Deliveries Index slipped below 50% in August after reaching this neutral level in July for the first time in 11 months. The Supplier Deliveries Index fell to 49.4%, down from 50.8% last month. This indicates that suppliers are able to meet delivery schedules even though Production is expanding at a brisk rate.

Supplier Deliveries	%Slower	%Same	%Faster	Net	Index
August 1991	5	88	7	-2	49.4
July 1991	7	88	5	+2	50.8
June 1991	4	86	10	-6	47.5
May 1991	3	87	10	-7	46.0

IN SHORT SUPPLY

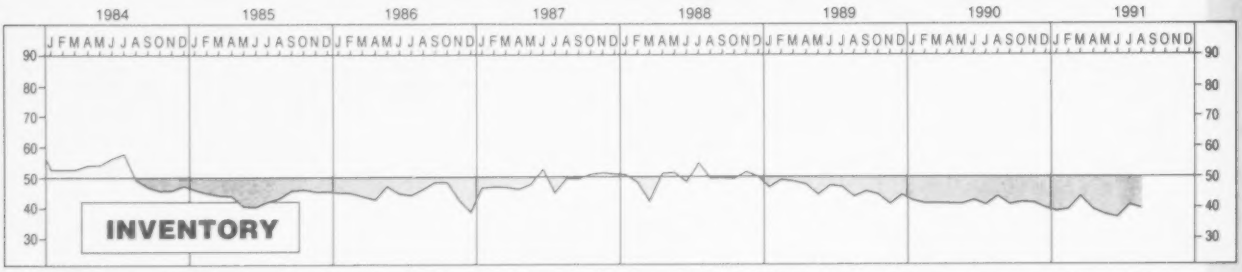
Bearings - 36th time in 37 months, generally only in military specification grade.

UP IN PRICE

Bearings; Steel Valves; Benzene - After being reported down in price in July (used heavily in making medicinal chemicals, dyes, varnishes, lacquers, and resins); **Textile Dyes** - 2nd consecutive month; **Lumber** - 3rd consecutive month, essentially only in the Northwestern U.S., where conservationists' efforts have been successful in reducing the Douglas Fir acreage the government will allow to be cut, causing shortages in lumber, chips for paper mills, and threatened reduction of log exports to the Pacific Rim; **Timber** - 3rd time in 5 months; **Solid Bleached Sulfate (SBS) Paperboard** - 2nd consecutive month; **Uncoated Offset Paper** - After being reported down in price in July for the 7th consecutive month; **Casein; Corn** - After being reported down in price in July for the 3rd consecutive month; **Corn Syrup** - Used in food and beverage processing; **Fuel Oil** - After being reported down in price in June for the 5th consecutive month; **Diesel Fuel** - After being reported down in price in July; **Gasoline** - After being reported down in price in July.

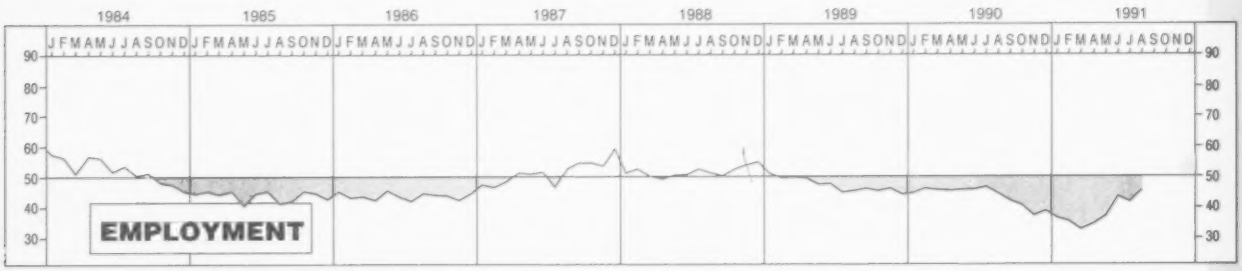
DOWN IN PRICE

Aluminum - 10th consecutive month; **Brass; Copper** - 10th consecutive month, some reports of price increases; **Platinum; Rhodium** - Used heavily as an alloy with platinum and as a corrosion-resistant electroplate for protection of silverware from tarnishing; **Steel** - 7th consecutive month; **Steel Pipe** - 2nd consecutive



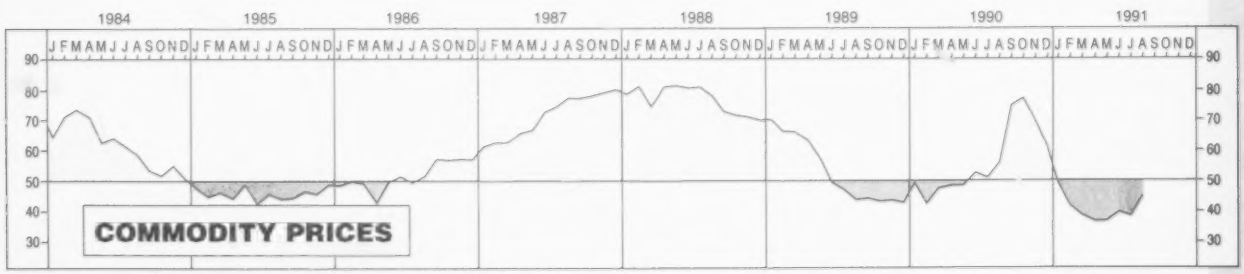
Inventories declined in August for the 33rd consecutive month at a slightly higher rate of decline than last month. The Inventories Index dropped to 39.6%, down from 40.7% in July. The continued decline in Inventories suggests that the growth in the manufacturing economy has taken place with little, if any, extra assistance from Inventory growth.

Inventories	%Higher	%Same	%Lower	Net	Index
August 1991	14	53	33	-19	39.6
July 1991	12	51	37	-25	40.7
June 1991	14	47	39	-25	36.7
May 1991	13	49	38	-25	37.5



Employment, a lagging indicator, continued to decline in August for the 31st consecutive month, although the rate of decline is the lowest in the past year. The Employment Index rose to 45.5%, a healthy increase from 41.7% in July, and the highest since July 1990 (46.6%). Similar increases in the next two months would indicate growth in manufacturing employment by October.

Employment	%Higher	%Same	%Lower	Net	Index
August 1991	12	64	24	-12	45.5
July 1991	12	62	26	-14	41.7
June 1991	14	61	25	-11	43.3
May 1991	5	65	30	-25	37.0



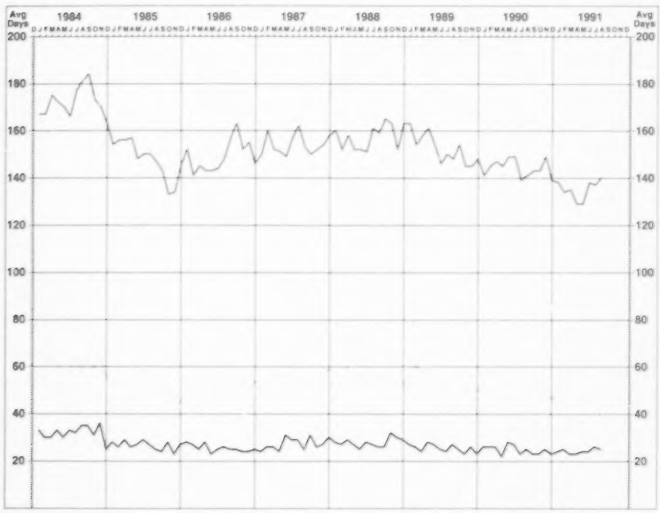
Prices continued to decline in August for the eighth consecutive month, although at the lowest rate of decline in the past six months. The Price Index advanced to 44.9%, up significantly from 38.3% in July, and the highest since January 1991 (49.1%). Numerous purchasers reported resisting announced price increases in September for a variety of basic commodities, including steel, paper, and certain plastic resins.

Prices	%Higher	%Same	%Lower	Net	Index
August 1991	8	69	23	-15	44.9
July 1991	5	66	29	-24	38.3
June 1991	6	66	28	-22	39.5
May 1991	5	64	31	-26	36.9

month; **Zinc** - 13th consecutive month (used heavily in galvanizing sheet iron, as an ingredient of alloys such as brass and bronze, as a protective coating to prevent corrosion of other metals, for electrical apparatus, dry cell batteries, building materials, and automotive equipment); **Linerboard** - 5th time in 6 months; **Corrugated Shipping Containers** - 18th time in 19 months; **Tall Oil-Crude and Fatty Acid** - After being reported up in price in May for 3rd consecutive month (used in making soap, greases, paint, linoleum, rubber formulations, and cutting oils); **Cotton Fabric** - 2nd consecutive month, after being reported up in price in May for 5th consecutive month; **Ethylene** - 7th consecutive month; **Glycerine** - 6th time in 8 months; **Hydrogen Peroxide; Maleic Anhydride** - Used heavily in making pharmaceuticals, agricultural chemicals, dye, intermediates and alkyd-type resins; **Methanol** - 4th consecutive month; **Phenol** - Used heavily in making phenolic resins; **Phthalic Anhydride** - 5th time in 7 months (used heavily in making artificial resins, benzoic acid, and phthalates); **Sulfur** - 2nd consecutive month; **Sulfuric Acid** - Used heavily in making fertilizers, dyes, adhesives, and other acids; **Plastic Resins** - 6th consecutive month (used in making plastic products); **Plastic Products** - 4th consecutive month; **Polyethylene** - 6th consecutive month; **Polypropylene** - 8th consecutive month; **Propylene** - 7th consecutive month; **Polystyrene; Styrene** - 9th consecutive month (used chiefly in making polystyrene, synthetic rubber, latex, polyester resins, and plastic products such as dinnerware, paneling, boat hulls, etc.); **Natural Gas** - 8th consecutive month, some reports of price increases; **Beef; Orange Juice** - After being reported up in price in July for the 2nd consecutive month; **Apple Juice** - 2nd consecutive month.

BUYING POLICY

Leadtimes for Capital Expenditures lengthened to 140 days in August, up from 137 days in July. This slight increase is still significant since it suggests that this lagging indicator is at last beginning to improve. Average leadtimes for Production Materials decreased in August to only 40 days, down from 47 days in July, and the lowest since NAPM began surveying leadtimes in January 1975. This record-setting short leadtime for Production Materials is reflected in the continued decline in inventories during a period of rising Production (i.e. if it takes less time to get inventory, manufacturers can get by with less inventory). Average leadtimes also declined for Maintenance, Repair, and Operating (MRO) Supplies in August, falling to 25 days from 26 days in July.

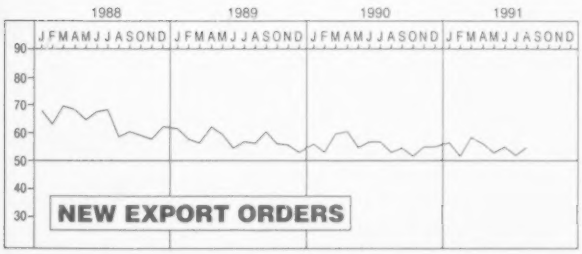


PERCENT REPORTING

Capital Expenditures	Hand to Mouth	30 Days	60 Days	90 Days	6 mos. and Longer	1 year + Days	Avg. Days
August 1991	12	7	15	21	29	16	140
July 1991	12	6	15	23	30	14	137
June 1991	11	8	12	24	31	14	138
May 1991	14	8	11	24	32	11	129

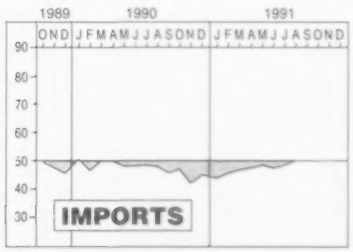
Production Materials	Hand to Mouth	30 Days	60 Days	90 Days	6 mos. and Longer	1 year + Days	Avg. Days
August 1991	21	45	24	8	2	0	40
July 1991	19	43	28	6	2	2	47
June 1991	19	44	26	8	2	1	44
May 1991	21	40	27	8	2	2	47

MRO Supplies	Hand to Mouth	30 Days	60 Days	90 Days	6 mos. and Longer	1 year + Days	Avg. Days
August 1991	45	40	11	3	1	0	25
July 1991	41	45	11	2	1	0	26
June 1991	42	45	10	3	0	0	24
May 1991	45	43	7	5	0	0	24



New Export Orders continued to grow in August. The New Export Orders Index, not seasonally adjusted, rose to 55.0%, up from 52.5% in July, and about the average for all of 1991 (54.9%). Members exporting slipped to 77%, down slightly from 78% in the previous three months. This 78% was the most to report exporting their products since NAPM began surveying New Export Orders in January 1988.

New Export Orders	%Exporting	%Better	%Same	%Worse	Net	Index
August 1991	77	20	70	10	+10	55.0
July 1991	78	18	69	13	+5	52.5
June 1991	78	24	62	14	+10	55.0
May 1991	78	18	70	12	+6	53.0



Imports ended 15 consecutive months of decline in August. The Imports Index, not seasonally adjusted, rose to 50.0%, up from 48.0% last month. Although 50.0% also indicates no growth, it is the highest level registered since April and March 1990 (both at 50.0%). Since NAPM first began surveying Imports in October 1989, Imports grew in only one month — January 1990 (a weak 50.5%).

Imports	%Importing	%Higher	%Same	%Lower	Net	Index
August 1991	76	13	74	13	0	50.0
July 1991	78	11	74	15	-4	48.0
June 1991	77	9	77	14	-5	47.5
May 1991	77	10	76	14	-4	48.0

DATA AND METHOD OF PRESENTATION

The **Report on Business** is based on data compiled from monthly replies to questions asked of purchasing executives in over 300 industrial companies. Membership of the Business Survey Committee is diversified geographically, based on value added by state, and by Standard Industrial Classification (SIC) category, based on each industry's contribution to Gross National Product (GNP). Twenty industries in 50 states are represented on the committee.

Survey responses reflect the change, if any, in the current month compared to the previous month. For each of the indicators measured [New Orders, New Export Orders, Imports, Production, Supplier Deliveries, Inventories, Employment and Prices], this report shows the percentage reporting each response, the net difference between the number of responses in the positive economic direction (higher, better and slower for Supplier Deliveries), and the negative economic direction (lower, worse and faster for Supplier Deliveries), and the diffusion index.

Responses are raw data and are never changed. The diffusion index includes the percent of positive responses plus one-half of those responding the same (considered positive). The resulting single index number is then seasonally adjusted to allow for the effects of repetitive intra-year variations resulting primarily from normal differences in weather conditions, various institutional arrangements and differences attributable to non-moveable holidays. All seasonal adjustment factors are supplied by the U.S. Department of Commerce and are subject annually to relatively minor changes when conditions warrant them. A sufficient history is not yet available for the New Export Orders and Imports Indexes to determine seasonal adjustment factors. Therefore, these two indexes are not seasonally adjusted. The Purchasing Managers' Index (PMI) is a composite index based on the seasonally adjusted diffusion indexes for five of the indicators (New Orders, Production, Supplier Deliveries, Inventories and Employment) with varying weights applied.

Diffusion indexes have the properties of leading indicators and are convenient summary measures showing the prevailing direction of change and the scope of change. An index reading above 50% indicates that the economy is generally expanding; below 50%, that the economy is generally declining. The distance from 50% is indicative of the strength of the expansion or decline.

Responses to Buying Policy reflect the percent reporting the current months lead time, the approximate weighted number of days ahead for which commitments are made for Production Materials, Capital Expenditures and Maintenance, Repair and Operating (MRO) Supplies, expressed as hand-to-mouth (5 days), 30 days, 60 days, 90 days, 6 months (180 days), a year or more (360 days) and the weighted average number of days. These responses are raw data, never revised and not seasonally adjusted since there is no significant seasonal pattern.

Economic Growth Continues in September; PMI Inches up to 55.0%; Employment Index Rises to 48.3%

SEPTEMBER REPORT

Analysis by the National Association of Purchasing Management Business Survey Committee; chair, Robert J. Bretz, C.P.M., director of corporate purchasing, Pitney Bowes, Inc. Data for this report was collected in September 1991.

The manufacturing economy expanded in September for the fourth consecutive month, say the nation's purchasing executives in their latest **Report on Business.** Production rose for the fourth consecutive month, but at a slightly lesser rate of growth than in August. New Orders expanded for the fifth consecutive month, although the pace of growth was less than last month. New Export Orders also continued to grow in September, while Imports declined for the 15th time in 16 months.

Employment declined for the 32nd month in a row, but at the lowest rate of decline since April 1989. Inventories declined in September for the 34th straight month, but at the lowest rate of decline in more than two years. Supplier Deliveries declined again in September, after rising in July for the first time in 11 months. Prices continued to decline in September for the ninth consecutive month, although the rate of decline was the smallest in that span.

The **Report** was issued by Robert J. Bretz, C.P.M., chairman of the National Association of Purchasing Management's Business Survey Committee, and director of corporate purchasing at Pitney Bowes, Inc. Said Bretz, "The economic recovery stabilized in September as the rate of growth edged up fractionally. After four months of continuing improvement, the rates of decline in three lagging indicators (Employment, Inventories, and Prices) decreased appreciably. Although the economy seemingly paused to catch its breath, the continued high level of growth in New Orders should be able to sustain moderate growth as the economy enters the final quarter of 1991."

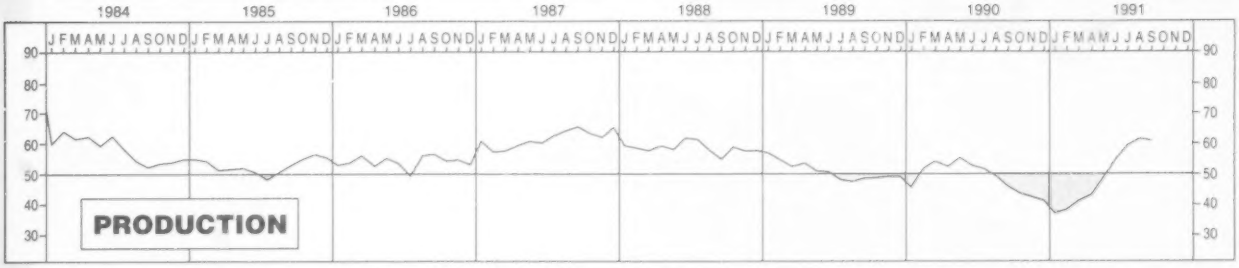
PURCHASING MANAGERS' INDEX

PURCHASING MANAGERS' INDEX (PMI)

September '90	44.9	April '91	42.1
October '90	43.6	May '91	45.4
November '90	41.6	June '91	50.9
December '90	40.5	July '91	51.8
January '91	37.7	August '91	54.8
February '91	38.5	September '91	55.0
March '91	40.0		

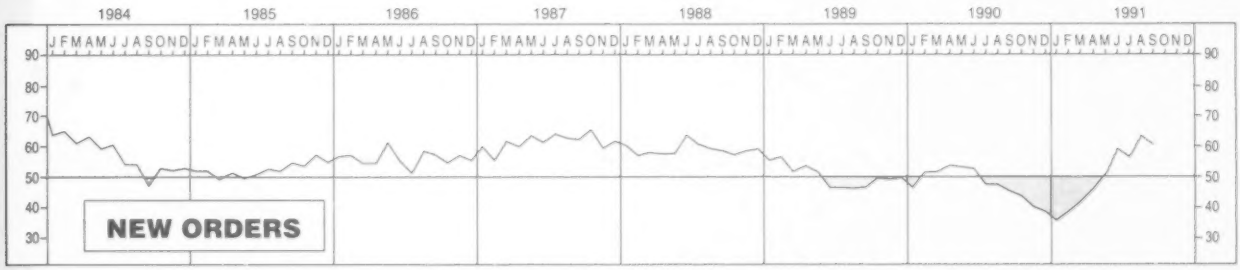
The Purchasing Managers' Index (PMI) rose to 55.0% in September and is the highest level reached since December 1988 (56.0%). The September rise marked the eighth straight month the PMI has increased from the previous month. September is also the fourth consecutive month over 50%. A reading above 50% indicates that the manufacturing economy is generally expanding; below 50%, that it is generally declining. Bretz added, "The PMI averaged 46.2% for the first three quarters of 1991, a rate that past experience generally indicates would be consistent with +0.7% real growth in the overall economy. However, if the PMI were to remain unchanged at the September level for the remainder of the year, then past experience also indicates this would be consistent with real GNP growth of approximately +1.4% for all of 1991."

BUSINESS



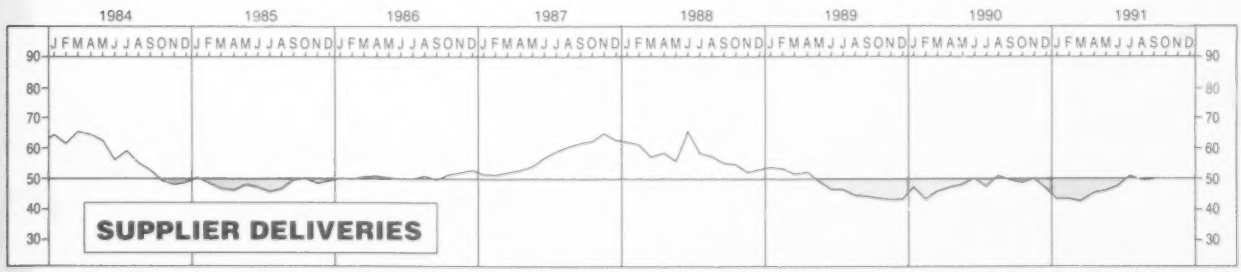
Production continued to grow in September 1991, although at a slightly lesser rate of growth than in August. The Production Index fell to 60.9%, down from 61.4% last month. Except for August, the 60.9% is the highest since July 1988 (61.2%). Growth in Production should continue through at least the final quarter of 1991, given the high level of growth in New Orders.

Production	%Better	%Same	%Worse	Net	Index
September 1991	38	49	13	+25	60.9
August 1991	34	49	17	+17	61.4
July 1991	29	53	18	+11	59.5
June 1991	31	51	18	+13	55.0



New Orders continued to expand in September for the fifth month in a row, although at a slower pace than in August. The New Orders Index fell to 60.4%, down from 63.1% last month and, except for August, is the highest rate of growth since July 1988 (60.6%). This level of growth in New Orders should be strong enough to provide continued growth in Production during the final quarter.

New Orders	%Better	%Same	%Worse	Net	Index
September 1991	37	50	13	+24	60.4
August 1991	38	45	17	+21	63.1
July 1991	31	46	23	+8	56.3
June 1991	38	42	20	+18	59.1



The Supplier Deliveries Index remained below 50% in September after breaching this neutral level in July 1991 for the first time since August 1990. The Supplier Deliveries Index did rise to 49.7%, barely higher than 49.4% in August. This indicates that suppliers are not generally having a problem meeting purchasers delivery requirements, despite the growth in Production.

Supplier Deliveries	%Slower	%Same	%Faster	Net	Index
September 1991	7	85	8	-1	49.7
August 1991	5	88	7	-2	49.4
July 1991	7	88	5	+2	50.8
June 1991	4	86	10	-6	47.5

IN SHORT SUPPLY

Bearings - 37th time in 38 months; **Castings; Caustic Soda/Soda Ash** - Used heavily in paper making, petroleum refining, and soap making; **Textile Dyes; Timber** - 2nd time in 5 months (essentially only in the Northwestern U.S., where conservationists' efforts have been successful in reducing the Douglas Fir acreage the government will allow to be cut, causing shortages in lumber, chips for paper mills, and threatened reduction of log exports to the Pacific Rim).

UP IN PRICE

Copper - Greater number of reports of price decreases; **Steel** - Equal number of reports of price decreases; **Steel Scrap; Bearings** - 2nd consecutive month; **Engines; Benzene** - 2nd consecutive month, after being reported down in price in July 1991 (used heavily in making medicinal chemicals, dyes, varnishes, lacquers, and resins); **Phthalic Anhydride** - After being reported down in price in August 1991 for 5th time in 7 months (used heavily in making artificial resins, benzoic acid, and phthalates); **Soda Ash; Styrene** - Used chiefly in making polystyrene, synthetic rubber, latex, polyester resins, and plastic products such as dinnerware, paneling, boat hulls, etc.; **Timber** - 4th time in 6 months, essentially only in the Northwestern U.S.; **Linerboard** - After being reported down in price in August for 5th time in 6 months — some doubts expressed about whether announced price increase will be accepted; **Corrugated Containers** - After being reported down in price in August for 18th time in 19 months — some doubts expressed about whether price increase will be accepted; **Folding Cartons; Uncoated Offset Paper** - 2nd consecutive month, after being reported down in price in July for the 7th consecutive month; **High Fructose Corn Syrup; Natural Gas** - After being reported down in price in August 1991 for 8th consecutive month; **Diesel Fuel** - 2nd consecutive month, after being reported down in price in July; **Gasoline** - 2nd consecutive month, after being reported down in price in July.